

PROCEEDINGS OF THE ROYAL ENTOMOLOGICAL SOCIETY OF LONDON

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ORDINARY MEETING

WEDNESDAY, 6TH OCTOBER, 1948, at 5.30 p.m.

AGENDA

1. Confirmation of the Proceedings of the Ordinary Meeting held on 1st September, 1948.
2. Recommendations of candidates for Fellowship.
3. Announcement of election of new Fellows.
4. Additions to the Library.

Presented.

- Fiat Review of German Science, 1939-1946. *Tropical medicine and parasitology*. 8vo. Wiesbaden. 1948. *Biology, Part 1*. 8vo. Wiesbaden. 1948. [Board of Trade (German Division), Technical Information and Documents Unit.]
- Kalmus, H. *Simple experiments with insects*. 8vo. London. [1948.] [The Publishers.]
- Kelsey, W. E. *The spell of the honey bee*. 2nd edition. 8vo. London. 1947. [The Publishers.]
- Chopard, L. *Nouvel atlas d'entomologie, No. 2. Atlas des Aptérygotes et Orthoptéroïdes de France*. 16mo. Paris. 1947. [The Publishers.]
- Berland, L. *Nouvel atlas d'entomologie, No. 7. Atlas des Hyménoptères de France*. 16mo. Paris. 1947. [The Publishers.]
- Dibb, J. R. *Field book of beetles*. 8vo. Hull. 1948. [The Publishers.]
- Musée Heude. *Fichier entomologique chinois*. Parts 1-5. 8vo. Shanghai. [1939]-1941. [Musée Heude.]
- Brues, C. T. *Insects and human welfare*. Revised edition. 8vo. Cambridge, Mass. 1947. [The Publishers.]
- Crompton, J. *The hunting wasp*. 8vo. London. 1948. [The Publishers.]

Purchased.

- Bronson, W. S. *The grasshopper book*. 8vo. New York. 1943.

In addition separates have been presented by Dr. A. da Costa Lima, the American Entomological Society, the Smithsonian Institution, Dr. A. M. Masee, Mlle. G. Cousin, Prof. P. A. Buxton, Departamento de Zoologia, Sao Paulo, Dr. I. Thomas, Mr. L. Davies, Mr. A. C. Townsend, Miss A. Halbert, Dr. P. J. L. Roche, Prof. F. Silvestri, Capt. E. Rivenhall Goffe, Dr. G. C. Varley, the Forest Research Institute, Dehra Dun, Dr. D. Miller, and Mr. H. G. Crawford.

5. Exhibits.

Fellows are particularly requested to bring suitable exhibits to the Meeting even though it may not be possible to announce their intention to do so before hand.

6. Admission of Fellows.

7. Communications.

Dr. R. L. Usinger (University of California, a visitor).

Speciation in Hawaiian Insects.

[ABSTRACT]

The Hawaiian insect fauna exhibits the following characteristics: It is depauperate; adaptive radiation is typical of the older groups; rapid speciation has occurred in small, isolated populations; new immigrants have invaded the lowlands; old relicts have retreated to the mountains. Each of these phenomena is illustrated within the tribe Orsillini, LYGAEIDAE, Hemiptera, a group which includes the false chinch bug and other members of the genus *Nysius*. From a study of the phylogeny of Hawaiian Orsillini it is concluded that isolation alone is sufficient to set in motion the process of speciation. It is further concluded that the Neodarwinian concept of speciation provides an adequate explanation for the tremendous numbers of closely related species which are so characteristic of the Hawaiian fauna.

TEA will be served in the Library before the meeting.

NOTICES

A card index of Fellows' addresses arranged on a geographical basis is now available for the use of Fellows in the Society's Rooms. Addresses in Great Britain are grouped under counties; elsewhere under Dominions, Colonies, Foreign States, etc.

ADMISSION OF FELLOWS

Any Fellow who has not been formally admitted to the Society under Chapter XIV, Section 4 of the Bye-laws and attends the meeting on 6th October, 1948, is requested to inform the Secretary before 5.15 p.m. on that date.

PROCEEDINGS OF THE ORDINARY MEETING HELD ON 1ST SEPTEMBER, 1948.

Mr. G. Fox Wilson, N.D.H., Vice-President, in the Chair.

Present, 41 Fellows and 6 Visitors.

In the absence of the President, owing to illness, the Chair was taken by Mr. Fox Wilson, who said that Dr. Williams was making a good recovery, and hoped to be present at the next meeting.

The minutes of the Ordinary Meeting held on 7th July were confirmed, and signed by the Vice-President.

The names of the following candidates for election were read: For the first time: M. V. Brian, A. J. M. B. Chalmers-Hunt, W. Cottier, D.Sc., F. Fernandez-Yepe, Ing. Agro, G. Heslop Harrison, B.Sc., Ph.D., F.R.S.E., P. H. Holloway, D. L. Johns, B.Sc., Major F. L. Johnson, M.B.E., W. Ruttledge, B.A., Lt.-Col. P. W. Morrison-Godfrey, K. L. Roos, Dr.Phil., G. H. Satchell, B.Sc., Ph.D., T. R. E. Southwood, F. T. Vallins, and P. R. Wilkinson.

For the second time: Miss B. Bradford, M.Sc., Miss E. M. Debenham, M. A. Ghani, Miss J. Glaholm, J. H. Porter, P. R. Stevenson, D. A. Tidman, and Dr. Luis Vargas.

The Secretary read the names of the following newly elected Fellows of the Society: W. Bunting, 72, Kirton Road, Thorne, near Doncaster; F. G. W. Jones, M.A., School of Agriculture, Cambridge; Mohammed Sayeed Quraishi, Ph.D., Fernald Hall, University of Massachusetts, Amherst, Massachusetts; P. P. L. Stevenson, The Firs, Denton, Grantham; Miss Saida Symmons, B.Sc., Natural History Department, Marischal College, Aberdeen; W. H. Trethowan, M.A., M.B., B.Ch., M.R.C.P., 29, Rotherwick Road, Golders Green, London, N.W. 11.

Thanks were voted to donors of gifts to the Library since the last meeting.

The following papers, accepted for publication in the *Transactions*, were read in title:

"On the origin and function of the pupal stage," by H. E. Hinton.

"Some observations on the classification of the MEMBRACIDAE and on the ancestry, phylogeny and distribution of the Jassoidea," by J. W. Evans.

"Observations on the species of Rhopalocera common to Madagascar and the Oriental Region," by A. S. Corbet.

"The genus *Nyctemera* Hübner: A, The species from Java," by W. Roepke.

"The biology of Humble-bees with special reference to the production of the worker caste," by R. A. Cumber.

The Secretary, on behalf of Mr. Alberto Breyer, a Fellow of the Society resident in Buenos Aires, exhibited a small box of rare Argentine Lepidoptera which Mr. Breyer had recently presented to the Society.

He also exhibited specimens of five species of Lepidoptera taken on Tristan da Cunha by members of a naval party, whilst stationed there on meteorological duties. The Mediterranean Flour Moth (*Ephestia kuehniella* Zeller) was to be expected, being almost cosmopolitan. The occurrence of *Plutella maculipennis* Curtis, the Diamond-backed Moth, on turnips was also not remarkable. The Noctuid *Peridroma porphyrea* Schiffermueller (better known perhaps under its older name of *Agrotis saucia* Hübner) was too well represented and so serious a pest on the island as to threaten the destruction of the potato crop. Early attempts to destroy the larvae by means of an arsenic spray were reported to have had only the very unfortunate effect of killing the chickens that fed on them; the larvae were said to be apparently unaffected by it. More recent experiments with arsenic of a more precise nature, to which reference was made in an issue of *Nature*, August, 1948, showed that this statement was indicative rather than factual, but nevertheless the kill was not very great. The fourth moth was *Leucania caxul* Walker, an endemic species known from nowhere else; whether its larva shared with *P. porphyrea* the responsibility for damage to the potato crop was not known. The fifth species exhibited was the butterfly

Vanessa braziliensis Moore, a South American Painted Lady. It was difficult to conjecture how this species had reached Tristan da Cunha, which was separated from South America by some 3,000 miles of water, in which both currents and trade winds were easterly in course. *Vanessa braziliensis* was also one of the few species of the genus in which no migratory tendency had ever been noted.

Miss Vere Temple exhibited a series of her own coloured drawings of various species of British Insects.

Mr. H. G. Crawford, Chief of the Division of Entomology of the Department of Agriculture, Ottawa, then addressed the meeting on the subject of the "Organisation of Entomology in Canada."

In the course of the discussion which followed, Mr. E. E. Turtle enquired whether any insecticide legislation existed in Canada, to which Mr. Crawford replied that there was a Pest Control Products Act, under which insecticides were submitted for registration in an attempt to establish and maintain a standard. His Department did not itself test insecticides commercially, but only in its own interests, and he added, in reply to an enquiry by Prof. Buxton, that attempts were made to check the chemical qualities from time to time.

Mr. Hawkins enquired whether any steps were taken to ensure that insecticides were not also fatal to insect-eating birds, and whether any decrease had been noted in bird life or beneficial insects in the areas where these preparations were used on a large scale. Mr. Crawford replied that there was no evidence of this in orchard spraying, although it had been found that nestling birds had died after eating caterpillars killed by D.D.T.

Mr. Riley and Miss Longfield expressed surprise at Mr. Crawford's reference to the dearth of amateur entomologists in Canada, to which Mr. H. H. J. Nesbitt replied that he thought this was due to two main factors, the lack of a leisured class, and the fact that the professional element was so highly developed.

Mr. Fox Wilson, in thanking Mr. Crawford for his interesting talk, asked him to convey the Society's greetings to his colleagues in Canada on his return.

N. D. RILEY, *Honorary Secretary.*

The next meeting will be held on 3rd November at 5.30 p.m.